

From: Handy Law, LLC

To: RI OER **Date:** 2.4.21

Regarding: 100% by 2030

Memorandum

This follows on Handy Law's comments filed for this process on September 30, 2020 (attached).

A. Transparency

One of eight principles of the National Standard Practice Manual for Benefit-Cost Analysis of Distributed Energy Resources (NSPM) published by industry experts (including the RIPUC's Todd Bianco) in August 2020 is to "ensure transparency." They describe that principle as follows:

Transparency helps to ensure engagement and trust in the BCA [Benefit-Cost Analysis] process and decisions. BCA practices should therefore be transparent, where all relevant assumptions, methodologies, and results are clearly documented and available for stakeholder review and input.

Starting on page 2-7, the NSPM describes the importance of transparency in more detail:

DER BCAs require many detailed assumptions and methodologies, and they typically produce detailed results. For regulators, utilities, and other stakeholders to properly assess and understand BCAs—and therefore to ultimately ensure that BCA conclusions are reasonable and robust—key inputs, assumptions, methodologies, and results should be clearly documented in sufficient detail.

Transparent documentation helps to ensure that the approach to cost-effectiveness analysis is consistent with fundamental principles, regulatory objectives, and applicable policy goals. It also facilitates and expedites regulatory and stakeholder understanding and review of cost-effectiveness analyses.

Transparency also entails ensuring that stakeholder input allows for review and discussion of the BCA assumptions, methods, and results.

This process, like others conducted by the Office of Energy Resources (OER) right now (e.g., technical sessions on community net metering), is not fully transparent in keeping with the NSPM's important principle. State officials and their consultants (e.g., Brattle Group) meet repeatedly with each other and the utility to direct the analysis that resulted in the generation of the BCA reports. The BCA reports are then presented to the public in technical sessions. The technical sessions appear to be the opportunity for stakeholders to comment and dialogue on those reports publicly. Stakeholders are instructed to do so by writing questions and comments in

the zoom chat function at which point the State, or its consultants, respond online. Stakeholders have requested copies of the questions and answers from the technical sessions as some record of the stakeholder input and the response, but the state officials moderating the technical sessions have not produced them.

Then, stakeholders are given the opportunity to file comments. Those comments were not posted, nor did they receive any substantive response except in a cursory summary provided with a final report that does not address even some very significant comments made. The comments seemingly go into a black box and the stakeholders are left hoping that such comments influence subsequent output from the process. However, there is little record of such impact or any real consideration of such comments. As discussed in more detail below, Handy Law provided very substantive comments at the outset of this "stakeholder process." However, there is sparse evidence, if any, that Handy Law's comments were considered or had any impact of the issuance of the reports and conclusions addressed in the last technical session.

The described process is not at all "ensuring transparency" as discussed in the NSPM. This kind of process does not ensure that the "BCA conclusions are reasonable and robust" or that "key inputs, assumptions, methodologies, and results should be clearly documented in sufficient detail." The lack of transparent documentation means that stakeholders cannot "ensure that the approach to cost-effectiveness analysis is consistent with fundamental principles, regulatory objectives, and applicable policy goals." As a result of the lack of transparency, stakeholders cannot meaningfully understand and review the cost-effectiveness analyses. The stakeholder comment process is critical to direct the future of energy policy for Rhode Island. Handy Law requests the OER provides transparency regarding how the OER's conclusions are reached.

Please also explain why this process is not being considered an administrative rulemaking under the RI Administrative Procedures Act, R.I. Gen. Laws §42-35 (APA). The technical sessions are resulting in rules as defined in the APA—"agency statement of general applicability that implements, interprets, or prescribes law or policy or the organization, procedure, or practice requirements of an agency and has the force of law." R.I. Gen. Laws §42-35-1(19). Given the substance of the recommendations that have resulted from the BCA (including OER's conclusions regarding a net metering subsidy and the excessive cost of distributed generation), OER should be following the rulemaking process, including transparency in a rulemaking record that includes publication of the receipt and response to all public comments. R.I. Gen. Laws §42-35-2.3.

Meanwhile, attached is an access to public records act request for all comments filed (including, but not limited to, those provided during the presentations online), and any responses to those comments and documentation regarding the interaction between the state and National Grid regarding this process. Handy Law asks for the requested materials to simply be posted on OER's website to ensure proper and full transparency.

B. Electric System Impacts

The BCA as presented did not provide any transparency on how the consultants evaluated costs and benefits to the electrical system as part of its BCA regarding alternative strategies for meeting the goal of 100% by 2030. Handy Law raised this concern in its first set of comments which stated:

Assess such electric system upgrade costs pursuant to appropriate rules (federal for transmission) and to ratepayers except only where comprehensive docket 4600 cost benefit analysis conducted by independent and qualified consultant demonstrates net cost to customers. Be sure to evaluate the costs and benefits of local DG vs utility scale imports comprehensively according to all elements of the docket 4600 cost benefit test.

Those comments appear to have been ignored.

The NSPM makes it clear how important the analysis of such system benefits is as part of any thorough BCA. The introduction describes the purposes of investment in DER to include "for example, reducing utility system costs, deferring capacity, providing demand flexibility, increasing reliability, reducing energy burdens for low- to moderate-income customers, managing grid power quality, and/or achieving carbon emission reduction goals." (1-1). Most of those purposes are to address system impacts that were not discussed in the Brattle Group's presentation of its BCA.

The NSPM summarizes the benefits: "Generally, DERs represent a critical component of the evolution of the electricity grid, allowing for a more flexible grid, enabling two-way flows of energy, enabling third parties to introduce and sell new electricity products and services, and empowering customers to optimize their end-uses and consumption patterns to lower their bills and utility costs." Id. In setting out the purposes of such a BCA, the first is, "How can DERs be used to reduce utility/power system costs?" Id. at §1-3. The first principle of the NSPM guidance is that "DERs are one of many energy resources that can be deployed to meet utility/power system needs. DERs should therefore be compared with other energy resources, including other DERs, using consistent methods and assumptions to avoid bias across resource investment decisions." Id. at Table 2-2. The manual goes on the describe how such impacts

should be evaluated in detail.

Slide 17 of Brattle's presentation from the third "technical session" depicts the consultant's process for "Analyzing Renewable Costs and Benefits for Rhode Island." The presentation lists the following factors for renewable energy generation: resource acquisition costs, GHG reductions, and local economic impacts (jobs, GDP, taxes). The presentation says nothing about system benefits. The presentation then lists the following factors for the New England Electricity Market: market revenues including energy, capacity and RECs. Again, nothing about system benefits. Then the presentation goes straight into "ratepayer costs," addressing "system impact costs" on slide 19. On slide 25, the presentation starkly concludes that "net metering shifts costs to non-customers" while the renewable energy growth program does not result in similar cost shifts. There is no transparency regarding the analysis or basis of support for any such conclusion. Further on, OER issues its policy proposal in slide 66, "Commence a forum for stakeholder dialogue and consensus building on the long-term costs/benefits of the state's net metering construct, as well as consider enhancements to reduce ratepayer costs and improve environmental sustainability and consumer equity, with recommendations due by December 31, 2021."

In point of fact, many studies have proven that distributed generation provides more value than the retail rate. Since net metering customers are paid less than the retail rate in Rhode Island (as in most jurisdictions), net metering customers most assuredly are not subsidized by other ratepayers. Those studies were gathered as part of the extensive research that went into RIPUC's docket 4600 process – see "Materials" at bottom of http://www.ripuc.ri.gov/eventsactions/docket/4600page. They include a "Shining Rewards" report which aggregates such valuation studies and, on page 6, graphs the results. That very telling graph shows that 8 studies conducted by Public Utility Commissions or other non-utility organizations demonstrate that distributed generation of renewable energy provides more value than is compensated under the retail rate. http://www.ripuc.ri.gov/eventsactions/docket/4568-WED-Ex4-BeyondRewards(11-23-15).pdf. It is no coincidence that the three studies that reached a different conclusion were all conducted by utilities. In just one of those many studies, in July 2015, the Acadia Center, a not-for-profit organization, published a valuation study for distributed solar generation in Rhode Island. The Acadia Center's study found that the value of distributed solar energy exceeds the average retail rate in Rhode Island. The Acadia Center's report on the Value of Distributed Generation in Rhode Island is available at http://acadiacenter.org/document/value-of-distributed-generation-solar-pv-in-ri/.

OER's same conclusion propounded here (that net metering costs ratepayers and must, therefore, be subsidized) is a concurrent product of an anti-transparent cost benefit analysis OER's hired consultants reached for the community net metering program. As a result of that simultaneously miscalculated study, OER now proposes to strip the capacity value from community net metered projects and give it to the utility. Many renewable energy proponents have questioned the accuracy of that BCA, but their comments appear to have gone unaddressed.

This is not a new issue. The OER's faulty valuation proposition is the same that utilities have long been pushing in this and many other jurisdictions. An alleged net metering subsidy was the basis for the utility's attempted "access fee" proposed in RIPUC docket 4568. When energy stakeholders refuted that filing for its presumptions about subsidization that were not evidenced by any proper cost benefit analysis, the utility ultimately withdrew its proposal. The PUC order in that docket called for the docket 4600 process to establish a cost benefit methodology and standard for Rhode Island. Docket 4600 engaged experts and stakeholders in developing that standard, which resulted in three categories of costs and benefits, to the electrical system, to customers, and to society. Here, the utility appears to have convinced our regulators and policy setters and their hired consultants to once again disregard the system benefits resulting from distributed energy resources.

When Handy Law questioned the failure to address system benefits from distributed energy resources in the technical session zoom chat, including the failure to address system impacts extensively defined in Docket 4600, the director of OER responded (as he has regularly responded in the past) that this was not a proposed rulemaking subject to the Docket 4600 cost benefit analysis. When we responded that any cost benefit analysis conducted to significantly shape Rhode Island policy must be done consistently with the cost benefit standards established in Docket 4600 or would otherwise just be inaccurate, the consultant responded that they had actually considered system upgrade cost impacts as part of their analysis and would provide more evidence of such consideration together with the release of the slide deck. We have since seen the slide deck, but no such evidence was provided. Moreover, system upgrade costs are only one element of system impacts, neglecting the many system benefits that can, and will, be realized through scaled implementation of distributed generation.

The impact of the Brattle Group's failure to account for benefits distributed generation produce to the electric system is compounded by its decision to assess the costs of interconnection as a strike against the cost effectiveness of distributed generation. The fact that Narragansett Electric commonly charges renewable energy developers costs to fix system

problems they do not cause or contribute to but actually help alleviate and reduce, cannot be considered a strike against the cost effectiveness of local energy solutions. For example, to consider local distributed generation too costly based on the cost of resolving transmission system impacts completely neglects and contorts the (fairly obvious) positive impact locally produced and consumed electricity has in reducing reliance on the transmission system to move electricity long distances to supply power. It also completely overlooks the dictates of federal law on the proper allocation of transmission system charges.

It is startling that two, well-respected consultants in the industry, Brattle Group and Synapse, have been willing to contort and compromise the integrity of their cost benefit analyses in order to support the utility position on this issue. After all, this question of valuation is of utmost importance to the future and the affordability of our energy system. Perhaps this should not be so surprising, since consultants are paid to do as they are instructed; but it is certainly disconcerting.

The failure to consider the benefits distributed generation resources produce to our electrical system obviously skews any purportedly comprehensive analysis of costs and benefits of renewable energy resources. To use any such incomplete analysis to support a conclusion that net metering customers are subsidized by other customers and ought to be valued less, is not only misleading, it poses a direct threat to the purposes behind RI's energy policy, to reduce costs and environmental impact while enhancing energy security.

Principle 3 of the NSPM is that "asymmetrical treatment of benefits and costs associated with a resource can lead to a biased assessment of the resource. To avoid such bias, benefits and costs should be treated symmetrically for any given type of impact." Table 2-2. Principle 4 is that "cost-effectiveness tests should include all relevant (according to applicable policy goals) material impacts, including those that are difficult to quantify or monetize." Brattle's BCA in this process violates both principles and more.

Rhode Island's energy plan (Energy 2035) focuses on energy security as one of three priorities, together with cost and environmental sustainability. Rhode Island cannot, and will not, get to greater energy security without fully considering all the benefits distributed generation provide to our electrical system.

- C. Issues with Valuing Certain Resources
 - 1. Undermining On-Shore Wind

Handy Law's comments on the first technical session presentation included the

following:

Don't let them underestimate land-based wind resource. The wind resource has proven much better than when OER studied it (look at more recent projects). Siting challenges cannot be a dead end – it's clear that local governments are very often going to prefer not to site any energy resources in their backyards but that is not a viable result. We need to do the proactive planning to determine definitively what the alternatives are (because none of them come without any impact, of course) & plan what we want where & then incentivize the municipalities to go along with the plan (like MA does - see Green Communities Act comment below). To just give up on land-based wind undermines the Governor's order, especially given all of the challenges with siting solar (which, by the way, need to be addressed similarly).

Underestimating the opportunity of onshore wind undermines the potential benefits of distributed generation. Wind is an extremely efficient resource both in terms of economics and land area for siting. When its potential is totally discounted, as has been done in this process to date, all of the economics of distributed generation are altered to Rhode Island's great disadvantage.

Yet, the consultant's BCA presented in the third technical session continues to totally discount the potential of onshore wind development in Rhode Island. In fact, the only land-based wind considered in the consultant's BCA is utility scale wind from other states which would have to pass across transmission lines to reach Rhode Island. The report concludes that such resources from across the region are of no economic benefit to Rhode Island. In point of fact, while offshore wind companies are controlled by foreign interests, Rhode Island's onshore wind industry is based in Rhode Island.

When Handy Law raised this concern in the technical session zoom chat, the consultant experts responded that studies have shown the wind resource on land to be inadequate. When we noted that the only study done in Rhode Island regarding the quality of Rhode Island's wind resource has been disproven time and again by wind projects already constructed in Rhode, Handy Law got no response. *See* http://www.crc.uri.edu/projects page/rhode-island-renewable-energy-siting-partnership-resp/. On November 25, 2020, the Providence Journal reported that once the 3 1.5MW wind turbines are constructed at Fields Point, 43.5 MWs of wind will have been developed on shore in Rhode Island, which far exceeds Revolution Wind's 30MW of offshore wind as the largest single source of renewable energy supply in Rhode Island. "3 More Wind Turbines for Providence," Alex Kufner (p A4). How can the state rightly downplay the significance and potential of such a supply?

When we posited that wind technology had significantly improved, the consultant raised turbines constructed in Falmouth, Massachusetts as evidence that the technology presents all kinds of problems including noise impacts. When we pointed out that the Falmouth turbines are old technology that has been vastly surpassed now and asked the consultants to please consider current technology as part of their analysis, we received no response.

To evaluate the costs and benefits of distributed generation without accurately assessing the great potential of land-based wind developed in Rhode Island is simply based on inaccurate premise. Such faulty premises threaten great harm to Rhode Island's interests.

2. The Utility Position regarding DER and Net Metering

Handy Law submits that it is problematic for OER to be consulting with National Grid throughout the technical conferences and development of the BCA reports. The BCA reports must remain independent to develop an energy system that maximizes benefit to all stakeholders.

Utilities have feared and opposed DERs and net metering since January 2013, when the Edison Institute, the industry association for investor-owned electric utilities, released a paper titled *Disruptive Challenges*. That paper outlined a dark future for the industry where flat electricity sales and the rapidly falling cost of distributed solar power threatened a "utility death spiral." Peter Kind, "Disruptive Challenges: Financial Implications and Strategic Responses to A Changing Retail Electric Business" (2013)

http://www.eei.org/ourissues/finance/documents/disruptivechallenges.pdf.). As one observer notes,

Following the release of *Disruptive Challenges*, utilities around the country, but especially in key solar markets, have responded in two significant ways to the challenge presented by distributed solar energy. First, they have sought to change rate structures to eliminate the incentives their customers may have to adopt the new technology, thereby suppressing the trigger of the death spiral. Second, and to a lesser extent, they have entered into direct competition with the companies that seek to provide distributed solar to electricity consumers, thereby positioning themselves to succeed in the new market environment to which the industry is transitioning.

Wara, Michael, Competition at the Grid Edge: Innovation and Antitrust Law in the Electricity Sector, 25 N.Y.U. Env. Law Journal 176, 180 (2017). Even after the author of Disruptive Challenges, Peter Kind, rethought and embraced the valuable role of distributed energy resources and net metering in reducing the total cost of our electrical system, utilities like National Grid persist with a refrain of strategies to undercut distributed generation and its system benefits. Peter Kind, Pathways to a 21st Century Electrical Utility (2015).

Our utility has its own competing economic interests. National Grid reports an annual operating profit of £2.87 billion (Annual Report 2018/2019 at 26, hereafter "AR"). National Grid operates the electricity transmission system and is the electric system operator in England and Wales, and operates the gas system for all of Great Britain (AR at 2). National Grid's U.S. affiliate owns gas transmission and distribution facilities in New York, Massachusetts, and Rhode Island; owns and operates electric transmission facilities in upstate New York, Massachusetts, Rhode Island, New Hampshire, and Vermont; and is an electric distribution system operator in upstate New York, Massachusetts, and Rhode Island. National Grid (the parent) spent a total of £3.5 billion on energy infrastructure over the year (AR at 30), generating a net revenue increase of 3% and increased its rate base of 9.2% (AR at 36). National Grid U.S. reported an annual operational profit of £1.724 billion (AR at 26), spending £2.6 billion on energy infrastructure in its United States regulated markets (AR at 36). Sixty percent (60%) of National Grid U.K.'s total revenue, and 74% of its total infrastructure investment, came from upstate "New York" and part of "New England." It is well established that distributed generation of local renewable energy projects reduce the need for such large infrastructure investments. National Grid Ventures (another "unregulated" affiliate of National Grid UK) has partnered with Orsted to supply electricity from its offshore wind project, Revolution Wind, to Rhode Island and Connecticut. In return, National Grid Ventures negotiated the right to provide the transmission interconnection and service between Orsted's project and the transmission system (AR at 39). National Grid's interests in the transmission and distribution system and in the interconnection of offshore wind indicates that National Grid is not impartial in the development of energy strategies. How can OER believe it is appropriate to consult with National Grid extensively in the process of developing the BCA analyses and recommendations for RI's plan to reach 100% renewables by 2030?

3. Application of the Renewable Energy Standard ("RES")

The Road to 100% Renewable Energy report prepared by the Brattle Group and OER, suggests that one path to "filling the gap"—meaning, the remaining forecasted load not served by Rhode Island's planned offshore wind developments and existing DER and energy efficiency programs—to achieve 100% renewable energy is purchasing more renewable energy certificates ("RECs"). An assumption the report makes is that "Rhode Island will increase the RES to 100% by 2030. Under this new RES requirement, suppliers would need to acquire and retire RECs

equal to 100% of their Rhode Island customer load (plus line losses) on annual basis in 2030 and beyond." See The Road to 100% Renewable Energy, at 10. The report then continues to note that amending the RES does not necessarily require Rhode Island shuttering all of its fossil fuel generators, but merely offsetting the carbon emissions those generators create through the purchases of RECs. Handy Law submits that such a program is a non-solution.

Purchasing RECs to fulfill the RES's renewable energy quota is merely an accounting process and does not provide the state the qualitative benefits of additional renewable energy resources being developed in-state. In effect, filling the gap through additional purchases of RECs is aiding other states, and possibly other regions (outside ISO-NE and NEPOOL territory) achieve their climate goals. The authors of the report even qualify the viability of filling the gap through purchases of RECs. The Executive Summary states, "RI should limit the extent to which it relies on short-term REC purchases to meet its 100% renewable goal to ensure that it will truly achieve incremental greenhouse gas reductions." Execute Summary, at IX. Later in the report, the authors also cite how purchasing RECs does not support local Rhode Island economies and bolster Rhode Island's GDP through construction. Stakeholders should reengage in discussions around the BCA process to ensure filling the gap is achieved by appropriately valued, in-state DER solutions.

Conclusions

We respectfully request full transparency. We ask for consideration of all costs and benefits including the system benefits produced by distributed generation and the real promise of Rhode Island's onshore wind resource.